Speech by Samuel H. Wilson at UCSD US/Mexico Border Research Meeting, La Jolla, CA June 12, 2000 (after dinner address; mixed scientific and lay audience)

U.S./Mexico Border Environmental Health: Communities Can Make a Difference

[off text briefly]

I want to talk with you tonight about a vision for better environmental health along the U.S./Mexico Border. There is a commonly held misconception that environmental health is only about removing toxic chemicals from the air, water, and soil. Instead, the goals of environmental health need to be much broader; the goals are to establish and maintain a beautiful, livable environment for humans and other living species; an environment that promotes well-being and a high quality of mental and physical health for its inhabitants; and an environment that can sustain its own quality into the future. This vision is for a beautiful, livable environment in which we raise our children in good health, with safe, clean water and recreational resources. And, an environment where manufacturing and agriculture can thrive, utilizing the most modern and effective technologies.

At the National Institutes of Health, environmental health science is part of the Nation's program to minimize disease through prevention. A significant number of the health problems facing society are preventable, and many of the preventable health problems are environmentally-related. Environmental health researchers want to understand the complex relationships of how the environment contributes to disease, and then find out how to prevent environmentally-related disease as completely as possible. Thus, the National Institutes of Health supports a significant amount of environmental health research on disease prevention and intervention.

In the past 30 years, many important achievements have brought us closer to the goal of a healthy environment. For example, toxicants such as lead and DDT, have been dramatically reduced; the air in our cities and the water in our rivers are cleaner and mechanisms are in place to keep them clean; and management of hazardous waste has improved. But these achievements must be extended. Many environmental health problems persist or worsen from day to day. Much remains to be done to protect our environment and our health.

The challenge lies in accomplishing this goal in a balanced way, while remaining in harmony with continued economic growth. The US/Mexico border represents a case in point.

A challenge facing environmental health today is to involve scientists, citizens and local leaders in the health of their own communities. Unfortunately, scientists, local communities and their leaders are often left on the sidelines in the fight to protect the environment, and this has serious consequences. Because the community is not sufficiently involved, the federal regulatory agencies fill the leadership vacuum. Environmental health all too often has become narrowly focused and narrowly defined around the pros and cons of a set of regulations; this narrow definition promotes divisiveness and conflict and ultimately less than optimal regulatory choices. For example, divisiveness and conflict surround the MTBE gasoline additive issue, or the issue of the precise amount of methyl mercury in our diet. The broad goal of environmental health is not being fulfilled in either case.

These complex and controversial issues can be solved only if environmental health is viewed in terms of overriding common values, and if compromise and common sense are used to help determine well-reasoned, scientifically-based approaches that are in the best interest of

the public. The local communities and university scientists need to assume their roles and responsibilities in the struggle to protect environmental health.

What can be done to move us forward? We need ways for the communities and scientists to assume leadership in finding common sense solutions, solutions that work right here locally. For example, what are the problems right here in this region, and what are the trade-offs that will work best here? Common sense, well-reasoned, scientifically-based solutions can be found if the issues are properly defined at the state and local level, and if proper scientific information is made available.

Environmental health science at the state and local level must grow and help in defining problems and in setting policy; scientists must work to create new information, for prevention and for clean-up, and scientists must also participate in finding ways to have environmentally sound economic growth and prosperity. Therefore, I urge <u>you</u> scientists here in the audience to get more involved in these matters, and especially to find better ways to communicate the scientific perspective, so the public can better understand it.

Let me again describe features of a proposed new NIH program in environmental health science, the BRIDGE Centers Program symbolizing environmental health science partnerships spanning the U.S./Mexico border. The proposed program, still very much in the planning stages, calls for several BRIDGE Centers along the ~2000 mile U.S./Mexico Border. We envision that each Center will be a consortium of university scientists and experts along with a blend of local, regional, and state groups.

Why do I say that university scientists need to be more involved? I will address the "non-scientist" in the audience first, and let me speak specifically to business and local leaders. Scientists--lets consider them for a moment: They are generally very practical,

bottom-line thinkers; they are logical and think in an evidence-based fashion; they can match scholarship with lawyers, consultants, and regulatory agency personnel, and they can enhance credibility for a project you are working on; they can also help in the critical areas of "problem definition." If, in your view, there is a bad regulation or environmental, how do you foster taking a fresh look at the picture? You need to involve politicians, obviously, but you also can do a much better and faster job when you involve and work with university scientists. The new BRIDGE Centers program is targeted in part to help local communities build interactions with university scientists. We want the local communities to see university scientists as a resource--a resource for scholarship, for problem definition, and also for communications.

To the university scientists in the audience: In the BRIDGE program, we want to promote outstanding scholarship in the environmental health sciences--research, training, outreach, and communications. The BRIDGE program will simply allow you to conduct more scholarship, especially in the areas that are most relevant to local human health issues. For example, the university groups here in the San Diego area are already using information technology in very powerful and innovative ways to approach environmental problems. This I.T. approach allows for a big increase in the precision of analysis of environmental health problems and can also eventually serve as a wonderful communications vehicle.

I will close by reminding everyone to have patience in developing a new university-based program such as a BRIDGE center. We need to have excellent communications as we move ahead, and I hope your plans will include a focus on local, real-world, relevant problems.